

AMERICAN BEE JOURNAL



GEORGE W. YORK,
Editor.

CHICAGO, ILL., MAY 1, 1902.

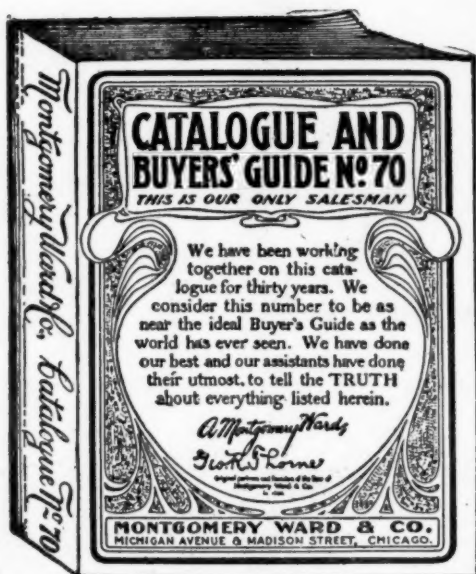
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No. 18.

WEEKLY



APIARY OF A. BOOMER, OF WATERLOO CO., ONT., CANADA.
—(See page 283)

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AMERICAN BEE JOURNAL

ESTABLISHED IN 1861 THE OLDEST BEE-PAPER IN AMERICA

42d YEAR.

CHICAGO, ILL., MAY 1, 1902.

No. 18.

Editorial.

New York Anti-Bogus-Honey Law.

—Such a law has recently been enacted, and is a credit to that great State. It will be worth much to the whole country to have the adulteration of honey stopped in New York City. Chicago used to be headquarters for such work, but since the Pure Food Commission came into existence, there has been precious little adulterated honey put on the open market here, and most of that has been labeled so that the purchaser could see that he was not getting the pure article.

Here is a copy of the parts of the New York law as amended:

AN ACT to amend the agricultural law relative to prevention of disease among bees, and to add two new sections thereto relative to honey, to be known as sections eighty-a and eighty-b.

Section 2.—Said chapter, three hundred and thirty-eight, is hereby amended by inserting therein, after section eighty thereof, two new sections, to be known as sections eighty-a and eighty-b, and to read respectively as follows:

Section 80-a.—*Defining honey.*—The terms "honey," "liquid or extracted honey," "strained honey," or "pure honey," as used in this act, shall mean the nectar of flowers that has been transformed by, and is the natural product of the honey-bee, taken from the honey-comb and marketed in a liquid, candied, or granulated condition.

Section 80-b.—*Relative to selling a commodity in imitation or semblance of honey.*—No person or persons shall sell, keep for sale, expose or offer for sale, any article or product in imitation or semblance of honey branded as "honey," "liquid or extracted honey," "strained honey," or "pure honey," which is not pure honey. No person or persons, firm, association, company, or corporation shall manufacture, sell, expose, or offer for sale any compound or mixture branded or labeled as and for honey which shall be made up of honey mixed with any other substance or ingredient. There may be printed on the package containing such compound or mixture a statement giving the ingredients of which it is made; if honey is one of such ingredients, it shall be so stated in the same size type as are the other ingredients; but it shall not be sold, exposed for sale, or offered for sale as honey; nor shall such compound or mixture be branded or labeled with the word "honey" in any form other than as herein provided; nor shall any product in semblance of honey, whether a mixture or not, be sold, exposed, or offered for sale as honey, or branded or labeled with the word "honey," unless such article is pure honey.

ABSTRACT FROM THE AGRICULTURAL LAW RELATIVE TO PENALTIES.

Section 37.—Every person violating any of the provisions of the agricultural law shall forfeit to the people of the State of New York the sum of not less than fifty dollars, nor more

than one hundred dollars, for the first violation, and not less than one hundred dollars for the second and each subsequent violation. When such violation consists of the manufacture or production of any prohibited article, each day during which or any part of which such manufacture or production is carried on or continued, shall be deemed a separate violation of the provisions of this article. When the violation consists of the sale, or the offering or exposing for sale, or exchange of any prohibited article or substance, the sale of each one of several packages shall constitute a separate violation; and each day on which any article or substitute is offered or exposed for sale or exchange shall constitute a separate violation of this article. When the use of any such article or substance is prohibited, each day during which or any part of which said article or substance is so used or furnished for use, shall constitute a separate violation, and the furnishing of the same for use to each person to whom the same may be furnished shall constitute a separate violation.

Section 2.—This act shall take effect immediately.

We hope other States will copy the New York law, and thus get into line for pure honey. Nothing would so help the sale and table consumption of genuine honey as stringent laws against the sale of the adulterated article, and their rigid enforcement.

Honey at Fairs.—Mr. Smith reports in the Canadian Bee Journal that several years ago at the county fair he made a display of honey in sections and extracted, both clover and buckwheat, some clear, some candied, several hundred pounds altogether. He says:

Well, the result rather astonished me. I was overwhelmed with questions about honey. "How did I get it in the little boxes?" "How was it some was so light and clear, another kind so dark in color?" "What made it candy?" etc. People who had never seen or tasted honey before, stopped to admire and express a desire to purchase some; and the result was that we sold all our cull sections by cutting them into 5-cent pieces, that were eaten on the spot, instead of candy, and many who had once tasted honey purchased some to take home with them. I had a crowd around the exhibit the whole time. The honey was all sold, and orders were taken to be filled later.

This proved to be the best advertisement we ever had, and was the means of introducing honey into many homes where it was found to be so much more healthful and economical than many of the preserves in common use.

Bad Bees they have up in Canada. A lawsuit is reported in the Canadian Bee Journal, a Mr. Brock suing for damage done by Mr. Patterson's bees. Some who have kept bees close by their homes without any misapprehension may be surprised to read how very bad Mr. Patterson's bees were. Listen:

In stating his case Mr. Brock swore that he owned a house and a half-acre lot west of Mr. R. L. Patterson, who also owned a house and a half-acre lot, and kept about 120 colonies of bees. Mr. Patterson's bees had been very

troublesome to himself and family. His mother and sister were afraid to go outside of the house on account of them, and especially at swarming-time. He could not cultivate his lot, and had to give up fruit-raising, not only on account of their stinging the pickers, but through their sucking the juices of the fruit and destroying the berries. He believed that he could not sell the property if he wanted to on account of Mr. Patterson's bees. His horse had been stung, and injured through fear of the bees. The family washing could not be hung out to dry without being spotted by their excrement. The roof of his house was also defiled, and when the rains came this matter was washed off into the cistern, rendering the water filthy and unfit for use. His wood-pile, too, was affected; he could not get any one to saw his wood, and sometimes the bees would crawl on the pieces and be carried into the house, where they would sting and annoy.

Mr. Brock's mother and brother and sisters, and a number of others, mostly relatives, witnessed for the plaintiff. Mrs. Brock swore having had to wash the clothes three times. One of the sisters declared she had to leave home on account of the bees.

The strange thing is, that Mr. Brock should ask only \$40 for all that harm, and that the judge should be so hard-hearted as to find no cause for action.

Size of Honey-Cans.—The 60-pound tin can is a favorite size. But G. A. Deadman says in the Canadian Bee Journal:

It may surprise some when I say that I prefer a 10-pound slip-covered pail to any receptacle I have yet seen for honey after it is granulated. In the future, or until further notice, any honey I have no market in view for goes into 10-pound pails. If an order comes for a 60-pound tin I can send six of these with the assurance that the customer will be pleased rather than otherwise. They are so much nicer to handle, and more useful when empty. In sending these you will be doing a favor rather than otherwise. You can fill an order for 60-pound tins with 10-pound pails; but you can very seldom send a 60-pound tin in the place of six 10-pound pails. A 10-pound pail of honey almost any family can buy, although where honey is expensive I find 5-pound pails are in demand.

The Buffalo Convention Report is issued in pamphlet form, size 6x8½ inches, 80 pages and cover. Besides a full report of the proceedings of the 32d convention of the National Bee-Keepers' Association, held in Buffalo, N. Y., Sept. 10, 11 and 12, 1901, it contains fine half-tone portraits of all the officers and directors of the Association; also the Constitution, a list of the membership up to the end of 1901, and the two latest bee-songs—"The Hum of the Bees in the Apple-Tree Bloom" and "Buckwheat Cakes and Honey." Price, postpaid, 25 cents, or with the American Journal one year—both for \$1.10. Every bee-keeper ought to have a copy of this Report. We believe it is the finest ever gotten out for the Association.

Convention Proceedings.

The Chicago Convention.

Report of the Semi-Annual Convention of the Chicago Bee-Keepers' Association, Held Dec. 5, 1901.

BY A SHORTHAND REPORTER.

(Continued from page 260.)

FOUL BROOD—HOW TO GET RID OF IT.

"How shall we get rid of foul brood?"

Dr. Miller—Take the McEvoy treatment.

Mr. Clarke—Get a State Inspector. In other words, get rid of foul brood.

Mr. Horstmann—There is only one way to get rid of foul brood—clean it out. I have had experience with foul brood for three years. I didn't know my bees had it until I got a report from Dr. Howard stating what it was. In the summer-time, during a good flow, drive the bees out on the starters of foundation—that's the McEvoy plan. After the brood hatches out take the bees off the honey and save it, and cut the other combs out and burn frames and all. Scrape the hives out clean, and use them over again. That's the way I did, and I believe I have been successful.

Mr. Moore—Have you any foul brood now?

Mr. Horstmann—I cleaned out one hive, I think it was Saturday. There was foul brood. The first of September I noticed that there was some foul brood, and I took the bees and drove them right off on frames; and this is an experiment I am trying for next spring. The idea is to have the bees consume all the foul honey they have this winter.

Mr. Marvin—I suppose there are a great many here that knew my brother by reputation. He kept bees for a great many years, and his bees had foul brood.

Dr. Miller—That was James Marvin, whom we all looked up to as an authority along with Mr. Baldrige.

Mr. Marvin—He was an authority. I have bees myself, and I want to tell you all, for your benefit as well as those who are in hearing, if you have any foul brood, why, get rid of it. Don't try to monkey with it, but just burn it right up and get rid of it.

Mr. Moore—How many have used the McEvoy treatment and gotten clear out by that method?

Mr. Horstmann—How long a time will he allow? How much time are you going to give us to try the experiment, a year, or two years? You can hardly report on one year. I cleaned some out last year and I took them out again this year. I don't know whether it was the cause of the treatment or whether the disease was spread by robbing. I think it was caused this spring by robbing. I had a colony that was weak, and had the hive-entrance closed. It grew very cold and they knocked the entrance block off and the bees pounced in there and cleaned it out. I believe that is what spread my foul brood. I worked on the McEvoy plan but I won't be able to report on that until next fall.

Mr. Baldrige—The McEvoy plan will cure foul brood; there is no doubt about it. There is another plan, but I will not detail that. You need not expect, if you get rid of foul brood, that you will keep rid of it. There is too much in the neighborhood. I had it introduced in my yard several times from the bees robbing other people's bees. My bees have foul brood now. I can get rid of it, but it won't stay rid of it; but it will be introduced from other yards if it is not entirely eradicated from the section of the country.

Mr. Marvin—I believe, if you get rid of it—the trouble is you don't get rid of it. There is something about the hives, the honey, the comb and the bees. You don't get rid of it. Now I tell you, there is no other way but to burn it. My brother was a thorough-going bee-keeper. Dr. Miller knows something about it. You cannot get rid of foul brood unless you exterminate. You won't get rid of it from neighbors' bees. If you have it at home, get rid of it. My brother tried everything he heard of. He had 667 colonies of bees. He lost all but three.

Dr. Miller—Has he three left yet?

Mr. Marvin—About three, I think, or half a dozen, and that was down at St. Charles. They weren't up with his

others; if they had been, he wouldn't have any. Let some one who has cured foul brood, get up.

Mr. Moore—Have you cured foul brood, Mr. Clarke?

Mr. Clarke—I have not. My bees have had a touch of it every spring, and I have a neighbor next door who labored with it for about two years. Mr. Marvin spoke of 667 colonies. I can imagine how it would spread to every hive if the combs were burnt, and the work was not done properly, even in half a dozen hives. I think it an entirely wrong idea to burn up the combs, because, unless a person goes to work and covers up entirely—we tried it—and the fire will not, and cannot, consume the honey and wax, the honey will run down and you move away the ashes and find honey underneath, and when moved away the bees will get in there and take it off into all the hives. But when you say that you can keep clear of foul brood by cleaning it out of your own apiary when you have it within a mile of you, I would like to see the man that tells me he has it but can do it. I don't believe there is an apiary that has foul brood within a mile but what I can find it in the cells. It may not form this year. The honey that is ripened in the fall is in the cell; you don't get any from the pussy-willow, but the bees will naturally go to work for brood. Those cells may lie in the frames and they may not develop, but as sure as you have a month of May like last year, if your bees have foul brood, by the middle of June you will have it developed so that you will have to throw out the whole colony. If you have foul brood thoroughly developed there is no mistaking it, even a single cell of it. You can go to the hive and take everything out. If you go in the evening, shake all your bees off into the hive and bury the frames—put them down the same as you would in the bottom of a well—you need not be bothered with foul brood again, if you do it that way. Burning I am dead against. There is not one in fifty I have known to do that way that is without foul brood.

Dr. Miller—Will Mr. Clarke tell us what he would do?

Mr. Clarke—I would bury every frame. The amount of wax wouldn't be worth the trouble and the risk you run by the bees taking the honey. I am dead against burning.

Mr. Horstmann—I have burned the frames and I guarantee there wasn't a bit of wax left. I have carried it into the basement and was sure there wasn't a bee near, then I saved what wax I could and also honey. The honey was all right, and I have taken all the frames and put them into a furnace, and they make the nicest kind of fire, and saved coal for me. Take it out in the country where you can get lots of leaves, and I know you can burn up every bit of it—not a germ left. You can take the old wax and let it dry some place where the bees won't get it, and I know you can get rid of it by fire a great deal better than burying it. It may be dug up. I don't know but what the disease may spread three or four years afterwards. As to burning up the frames, bees and all, that is away behind the times. I think we have bee-keepers in this country that can exterminate foul brood without burning up the bees and all. I don't like the idea of burning bees, and I wouldn't do it. I think I have about as good a way as you can get.

Dr. Miller—Is there any city ordinance against combining the two, digging a pit deep enough to bury, and then burning it and burying the ashes? [Laughter].

Mr. Dadant—I have had no experience with foul brood. I never have seen a case even away from home, but I wish to say that I buy beeswax to make foundation, as you know, and in that way we certainly have many cases of foul brood; and our bees have access to the building in which we keep our crude material, and our bees get to all the beeswax that comes to us. If there is any honey about it they get it. And, remember, we have been doing that for 25 or 30 years, and I have never seen a case of foul brood. The scientists tell us that a temperature of 212 degrees will destroy any germ of life. Germs of foul brood, bacillus alvei, are living germs, and just boiling water will destroy them. Scientists tell us that, and I am satisfied that it is so. If it wasn't so I would have seen foul brood before this. As to the burning of bees, some of you say if you burn the hives you will destroy it, but perhaps some of the other hives will have it. Do you realize that foul brood is a disease? We had plagues—Asiatic cholera and small-pox—and there was a time when they put persons having either one of these diseases in the pesthouse and left them there to die. No one would go near them. Did that cure it? No. It was only when men devoted themselves to discovering a remedy, and in an assembly like this we don't want to advise burning it. Find a remedy. When we have a case of small-pox we vaccinate all who are around. You don't want to apply the treatment only to the one colony, apply it to every colony. When you have one, you don't know how many side by side may have the germs, just a small germ that may not develop for two or three months. If you treat not only the colony th

is diseased, then you can tell, as I have done, that you have cured it. But you tell us to destroy it by burning it. That is equal to the pesthouse. Did that cure it? Do you know how many cities were destroyed? Even to day when we are careless of the small-pox it spreads in our town. We vaccinate every one. We want to discover a cure, and not apply it to one but to every colony, and if you are careful even to the neighbor's bees, and if you find it will cure it, as you must sooner or later, then you have achieved something. Here is a gentleman that out of 667 colonies saved three. Might just as well burn them all at first, then.

Mr. Marvin—He was trying other experiments.

SHIPPING FOUL-BROODY COLONIES INTO ILLINOIS.

"Can a bee-keeper be prevented from bringing foul-broody colonies into Illinois?"

Mr. Moore—I think a great many things on this foul-brood question, but I don't suppose I can express them in a way that will be particularly interesting. About two years ago I found I had foul brood in my apiary. I had no experience with it whatever, but I began to read up on that question and I struggled along in my weak, imperfect way attempting to get rid of the disease. I studied up the McEvoy treatment and tried to carry it out. I failed in this. Last summer, in my apiary—I had about 30 colonies at that time—I repeatedly took all the bees off the honey and frames and gave them new frames, and gave them foundation, burning the whole thing up bodily, except the hive and bees. The result was I lost 20 colonies and out of the eleven I now have I am satisfied four or five are still diseased. I would have no objection to burning them up if I could get rid of it. I had any quantity of kindling, so that where I burnt up a pound of foul brood I had ten pounds of kindling to burn it with, and I got the fire good and burning, and I put it on and am satisfied that everything was burned up. Dig up the ashes and bury them in the ground about a foot, and you have clinched the thing. I think there is no way for the ordinary, every-day bee-keeper to get rid of it without burning it up. The McEvoy treatment may be all right for Dr. Miller, who can spend days and weeks at it, but for ordinary, everyday bee-keepers it is a failure. To burn up everything that comes in touch with it, even the hives, I am satisfied is the way to do it, excepting of the honey, brood and frames. Burn it up, then you have a fair, fighting chance. Mr. Marvin says you don't get foul brood from the outside, and you would better get rid of it in your own apiary when it is there. My experience is from 33 colonies down to 11, and nearly everything I have now is infected with foul brood, and I have been experimenting long with it. Perhaps if I had spent all my time at that, and quit my other business, I would have gotten rid of it, but in my own weak way I have tried to get rid of it and I have failed absolutely. The first thing, we ought to have a good, drastic law in this State. No use in going into details. You all have read about the laws other States have. Well, that covers the thing completely. A foul-brood inspector goes with them, and burns and destroys if necessary. I take it that there are 12 apiaries in this (Cook) county that are infected now with foul brood, and there is a chance to infect the whole State with foul brood.

Mr. Clarke—Can Mr. Moore tell us what time of the year it was when his colonies were infected?

Mr. Moore—It was mostly last spring, from April to July.

Mr. Clarke—Was it in April or May?

Mr. Moore—Probably May, June and July.

Mr. Clarke—You did your work in the worst possible time you could. This not only from my experience but from every bee-keeper's around, as there were very few days that you could open the hive and not have robbers come in, and you would get it into every other colony you had in the yard.

Mr. Moore—It is very easy to talk about what is the best thing to do. It is very easy to read McEvoy, but you know how hard it is to go home and carry out to the letter things that we believe are right to do. We won't do it. The moral is, to take the most drastic possible method with your case of foul brood. Do the thing you are absolutely certain the foul brood won't get away from, and I say there is nothing else but the consuming fire that will break up foul brood.

A Member—If this method is proceeded in, and a drastic law enacted by which all foul brood is destroyed beyond all recognition, where is there ever going to be any chance to experiment?

Mr. Marvin—I think we have had too much experimenting. When men can't get up here and tell us—among all the bee-keepers, and women, too—how to cure it, and cure it effectually, I think it about time to exterminate it, and I think that is the cheapest way. We don't want to spend money for nothing. Go right to work and exterminate it right at the

start when we find we have it, and then start in again buying new comb; I think this is the cheapest in the long run.

Mr. Clarke—I have tried the McEvoy treatment, and I have never known it to fail if it is done properly.

Mr. Moore—Your bees now have foul brood?

Mr. Moore—I am likely to have it in the spring because I have it around me. Directly you have foul brood in the colony it will show it.

Mr. Dadant—From the outside?

Mr. Clarke—From its work.

Mr. Horstmann—When I first noticed foul brood I had five colonies, and I have increased to 27. I had 1,700 pounds of honey the past season and cleaned out, I think, five or seven colonies. I worked on the McEvoy plan, and got over 90 pounds of honey from the colony I treated in June. If that doesn't show up well, I will give up.

Dr. Miller—There are some of us who haven't any foul brood in our apiaries. We will all take foul brood home with us. I move we change the subject.

"What is the best way to prevent foul brood, and keep it out?"

Mr. Dunn—That's what we all want to know.

Mr. Stanley—I have tried it. I think it can be done without burning the bees and destroying them. I will explain my way. It is to re-queen the colony, and about ten days afterwards shake the bees off the combs on the starters, and boil the combs up and use for wax, and the honey can be used after boiling. In 1884 we had over 200 colonies, and treated about 20 that way, and we had a barrel of honey and had no bad results.

Dr. Miller—That's the McEvoy treatment, but you had the additional—

Mr. Stanley—Then I re-queen the colony.

Mr. Horstmann—I would advise no one to handle foul-broody colonies unless there is a good honey-flow on. Then you will have no robbing; but be sure that there is a good honey-flow on.

A Member—Did anybody ever know foul brood to spread during a good season? It is during a poor season—that's when it spreads.

Mr. Walker—We don't have poor seasons here. There are several quite important particulars that he might tell us about. As to whether he handles them in broad daylight or was careful to handle them just at dark, and careful to see that no bees got into some adjoining colonies, as they are put off. I have had experience with foul brood for at least 20 years. I fancy Mr. Moore asking me why I am not rid of it now. I am rid of it now; and I will say that I have had more or less of it nearly every day from 20 years ago up to now, but it is because I have had to ship so many bees from different places. I have found out that foul brood, when you suppose you are rid of it you have to go at it again to get rid of it. It has been eternal vigilance in my case. McEvoy's treatment I have adopted, and it is all-sufficient. Some have tried a few cases, one season or two, and sit in judgment on Mr. McEvoy, to find out whether his treatment is proper or not. By way of suggestion, I think we get honey from all over creation, and then transport it all over, and expect to get rid of foul brood, and keep rid of it.

Pres. York—"Can a bee-keeper be prevented from bringing foul-broody colonies into Illinois?" Does any one know?

Dr. Miller—I don't believe there is a law to prevent it.

Pres. York—"Is the queen responsible for foul brood?" How many think she is—raise the hand. Two.

Pres. York—"With foul brood one-half to three-fourths of a mile from you, is it possible to keep from it in your own apiary?" How many think it is?"

Dr. Miller—It depends upon what kind of neighbors you have to keep bees.

A Member—Was foul brood ever known to exist in bees in a wild state?

Dr. Miller—Yes.

(To be continued.)

The Texas State Convention.

The 24th annual session of the Texas State Bee-Keepers Association was held in Greenville, April 2, 1902. Vice-President J. M. Hagood called the meeting to order, and prayer was offered by the chaplain. About 25 bee-men were present, representing nearly 3,000 colonies of bees, and an average of 20 pounds of honey per colony the past year, which year was the hardest on bee-culture in the experience of bee-keepers.

The convention was in session two days, and topics of great interest to all were discussed.

The venerable president, W. R. Graham, was too feeble to be present and preside, very much to the regret of all.

Messrs. Hagood, Morgan and Cooper were elected delegates to the Farmer's Congress to be held at College Station next July. W. R. Graham was re-elected president; J. M. Hagood, vice-president; and F. N. Hunter, secretary.

Contributed Articles.

Don't Neglect the Bees—Other Good Advice.

BY MRS. L. C. AXTELL.

I BELIEVE the time is not far distant when the bees will do well again. We have had so many dry years here in the West, and the people are getting a good deal discouraged with trying to make bee-keeping pay, and so each year the poor bees are left more and more to live or die, just as it happens; and often they die for want of a little care.

Some of us will awaken one of these days to find a fine honey crop, and no bees, or but a few, to gather it.

"The platter kept right side up" should be our motto, and when the good honey season comes again, as it surely will—everything else will dry up and all farming cease to pay—then, I say, when the good seasons come again, bees will increase and again fill their hives with honey as if by magic—if the bee-keeper has his bees in good condition. But if the bees have been neglected there will be no bees to gather honey, and all will be wasted, and the bee-keeper will take up the lamentation that "bees don't pay," when it will be his own fault, and not the fault of the bees.

BEE-KEEPING A SPECIALITY.

I am not sure but it pays to make bee-keeping a speciality. What is there we do make a success of if we do not make a speciality of it? I am sure it is not farming. Being merchants, or school-teachers, or any other business—we need to put our whole soul into any work we wish to make a success of, and push, and push, and push.

This is why some succeed and others fail. They simply play at work, and at every little failure will give it up and try something else. If one makes a speciality of his bee-work he will see to it that his bees are kept in good condition, so that they can take advantage of every honey-flow; he will see that there is no spraying of fruit-trees done in the neighborhood while the trees are in blossom, as spraying fruit-trees while in blossom will surely kill bees, and so depopulate the hives as to cause the colonies to be so weak that they cannot build up into strong colonies in time to gather a crop of honey when it does come, as it is strong colonies that gather a surplus of honey, and weak colonies get but little more than a living, and often not that.

BEEES A BENEFIT TO FRUIT MEN.

It seems a pity that there should be any friction between bee-keepers and horticulturists. If there is any difference it is the horticulturists that are more benefitted by bees than bee-keepers being benefitted by fruit. Bees do get a little honey from fruit-bloom, hence they may be poisoned when spraying is done, while the trees are in blossom; but most fruits are an injury to bees. It is almost universally acknowledged that the bees flitting from flower to flower carry the pollen, and thus cause the trees and bushes to have more and finer fruits.

Horticulturists and bee-keepers should be firm friends, and thus help each other, and if losses do occur, to help each other bear the losses. If the bees seem to be hard on their neighbors' vineyard, let the bee-keeper be generous with his honey, and also the owner of the vineyard gather his grapes as soon as ripe and not leave them longer to crack open and thus tempt the bees, as bees never bother sound grapes. If both bee-keepers and horticulturists would vie with each other to make the injury light, and overlook what cannot be avoided, or do as they would wish to be done by, there would be no need of resorting to law. Honey is a wonderful sweetener!

BEE-KEEPING FOR INVALID LADIES.

There are many households where there are sick daughters that might be greatly benefitted if they would take more out-of-door exercise; and if they could be presented

with a colony of bees, or even given the profit from one or more colonies, it would give them new life. If once they could be induced to study the bee, they would find it so wonderful that many hours could be profitably passed in studying the mysteries of the hive and its wonderful inmates, and soon new life would come to the sick one in forgetting self, and in the prospect of earning a little fortune from the care of the busy bee. And when the bright, sunny hours of spring come, and the bees with their happy hum are flitting from flower to flower, the sick one would be induced to go out-of-doors and forget self and the many aches, as nothing is so conducive to health as to forget self and become intensely absorbed in something else, especially if one can see there is profit in it; and if one is so desirous of health that he or she will endure a little hardship in the way of working with bees, even if it does tire them some, and will grin and bear the stings, if they get any, as stings are a wonderful tonic—a summer thus passed may brown the face some and discolor the hands somewhat, but it cannot fail to bring more roses to the cheeks and a brightness to the eye, and give elasticity to the step, and an appetite that had before been a stranger to them. Never mind if the clothes do get somewhat soiled, it is "clean dirt;" and if you get too tired to walk, just lie down on the "soft side of a board" anywhere, if it is out-of-doors, or on the green grass, if the ground is warm and dry; and then look at the bees as they labor so earnestly to do their best, which they always do. I am sure, ere many weeks have passed the sick one will be on the highway to health, if not already there.

Warren Co., Ill.



Foul Brood—Its Alarming Spread, Etc.

BY C. P. DADANT.

I have lately been reading reports of foul brood, and of the number of colonies treated in different States by a number of foul-brood inspectors. The last in my hands is the Colorado report, made to the Secretary of the State Association by a number of County inspectors, and published in the "Rocky Mountain Bee Journal" for January, 1902. These reports make me feel very much behind the times, for after some 33 years of active bee-keeping, and a good portion of the time on a large scale, I have yet to see the first case of foul brood, not only in our own yards, but also in any yard that I have visited from time to time. My father, whose experience goes back some 20 years farther, also says that he has never seen a case of foul brood. It is true that we have had, occasionally, especially in early spring, a case of dead brood, generally caused by spring-dwindling, or by the desertion of the bees, but this accidental dying of brood was easily ended by the prompt burying of the dead brood, which removed all danger.

But here is a report that astounds me. According to this report, in the State of Colorado, in 1900, out of 7952 colonies inspected 799, or a little over ten percent, were found diseased. In 1901, out of 13,131 colonies inspected, 804 were found diseased, or a little over six percent. Just think of it!

I take it for granted that not all the bees in those counties were examined, for that would be a terrible condition, if that percent of all the bees were infected with foul brood. But the report does not say anything about the probable number of colonies in the country, and we are led to infer that the number mentioned covers all the bees in that portion of the country. It seems to me that a more detailed statement ought to be published. For instance, the report ought to state in how many apiaries the disease is found, where they were located, how many apiaries were found immune; and, if any apiaries were not examined, how many of these, and the reason why they were not examined. The probable number of colonies in the State ought to be embodied in the foul-brood report, so that strangers reading such a report may not be led to believe that this contagion is spread all over the State.

The reason that prompts me to ask this, is that the plain report, as printed in the journal, will give foreigners a very bad idea of the condition of bee-culture in the States where such reports are printed.

It seems to me that it would be well, also, that the localities where the disease is raging with the greatest vehemence be mentioned in the report, so that bee-keepers should avoid buying bees, or honey for feeding, from those localities until the disease has been conquered.

A contagious disease should be treated as all contagions are—by a prompt and effective quarantine. This quarantine will be in the interest of the affected apiaries themselves,

because it is necessary that the disease should be confined in as small a space as possible.

This is very much like battling with small-pox. Our little town was invaded by that dread disease last November. Just as soon as it was detected, the facts were published by the Mayor; the houses of the sick were quarantined, and the public houses were closed. The town put itself under strict quarantine for some 40 days, and at the end of that time the disease had disappeared. In a neighboring city they kept the light under the bushel, for fear of losing trade, and the result was a much longer and much more extensive siege of the disease.

But while we are carefully guarding against foul brood, let us not be hasty in declaring the existence of foul brood at the first sight of a cell or two of dead brood. Foul brood is a special disease, which has been described often enough to make every body familiar with it, and when a case of dead brood is found, one ought to make absolutely sure that it is a case of malignant foul brood before resorting to the extreme measures which foul brood demands.

At two different times in my experience I have had samples of dead brood sent me by bee-keepers who thought they had the dread disease in their apiaries, and in both cases I had the pleasure of informing them that I did not believe the disease was the true contagion. In both cases the subsequent disappearance of the disease proved that this was correct.

But in the modern methods of rearing and shipping queens all over the country, there lies a great danger, and, for that reason, I believe that the State inspectors, after making absolutely sure of the existence of the disease in a locality, ought to publish the fact in their report. After the disease is cured, it would be their duty publicly to mention that fact also. Can we not hear from some foul-brood inspectors in regard to this matter? Hamilton Co., Ill.

[Any or all the official foul-brood inspectors are invited to express their opinions on this subject, in these columns. —EDITOR.]



No. 5.—Bee-Keeping for Women.

An Ideal Occupation for People Suffering from Nervous Troubles.

BY EMMA M. WILSON.

I HAVE received a letter from a lady in New York, asking a number of questions, seeking further information in regard to bee-keeping for women. As the answers to these questions may be of benefit to other readers of the American Bee Journal, I have concluded to give them here.

This lady is suffering from nervous prostration, and would like to know if I had any of her symptoms, and, if so, if I took much medicine, or simply trusted to the open air and suitable diet to cure me. I did not have nervous prostration, but I do not know how soon I might have had it if I had kept on teaching, as I needed a rest, both physically and mentally. It is not best to take any more medicine than can possibly be helped for nervous trouble, and I certainly would trust much to out-door air and suitable diet.

If you belong to the class of nervous people, bee-keeping is an ideal occupation for you, if a genuine interest in bees is once awakened. Why? Because it keeps you in the open air; gives you physical exercise of the right sort in that which deeply interests you; and because it takes your thoughts entirely away from yourself. That last is what you need more than anything else. You are obliged to give your whole attention to what you are doing while working in the apiary. Often and often people have stood for some time a few yards away from Dr. Miller and myself, watching us work, and neither of us knew they were there until they spoke, so intent were we on what we were doing. Not much time to think of your own aches and pains, you see. And nervous people can make themselves believe they have any disease under the sun if they only think about their own aches and pains long enough. Nervous people are poor sleepers, and that which will keep their thoughts off from themselves, and keep them in the open air, will induce sleep, if anything will. It must be dreadful not to sleep a wink for two or three nights in a week, and certainly anything that would help to counteract such a state of affairs would be a boon, even if there were no money in it.

This lady has been taking boarders. She says she would like to hire most of her housework done, and work

with her husband in the apiary. Let me advise you to give up all thoughts of boarders for the present, get as good a hired girl as you possibly can (for I think a poor one is worse than none), and give up all the care you can. No matter how good your help, the care of boarders would still be left upon you. It is not work that kills people so much as worry and fretting. A good, hearty laugh is worth more than a dose of medicine for nervous trouble.

The first thing to do is to get well. So please remember what I say: Give up the boarders as the first step. Try not to worry about anything, and keep in the open air as much as possible; then think about your bees instead of yourself, and I firmly believe you will soon be well.

To your further questions I answer as follows:

No, I do not run an apiary of my own. I work with Dr. Miller.

When we have a large enough crop of honey we ship it; if very small, we sell at home.

Yes, I wear gloves. I have described what kind in previous article.

McHenry Co., Ill.



A Feeder for Feeding over the Frames.

BY H. DUPRET.

M. R. TURNER BUSWELL, of Maine, desires me to describe the chimney feeder covered with glass, which I referred to on page 215.

In answer, I beg to say that the chimney feeder is a very simple affair. The principle involved is to allow as little warmth to escape from the cluster of bees as possible, and at the same time to give the bees free access to the feed, without compelling them to take more than they want. Any

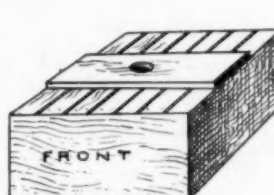


FIG. 1.

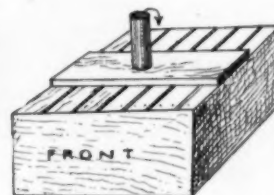


FIG. 2.

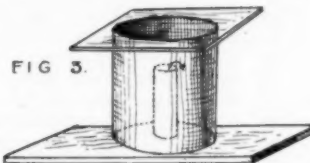


FIG. 3.

FIG. 1.—Communication Bridge with $\frac{1}{4}$ -inch space under it.
FIG. 2.—Chimney Feeder on top of the frames.
FIG. 3.—Feeder and Communication Bridge combined.

tin box or can will do. Punch a hole in the center, about one inch in diameter; solder a tube or chimney around this hole, taking care to make the chimney shorter than the walls of the box by $\frac{1}{4}$ inch at least. Put in the feed (if liquid, cover it with bits of cork or wax to prevent the drowning of the bees), place the box in communication with the cluster of bees, on top of the frames, providing a stick as a ladder in the chimney for greater convenience of the bees. Then cover the feeder box with a glass, so that you can watch the actions of the bees whenever you wish. Cover also snugly the top of the frames with any warm material.

For greater convenience together with this feeder I use a Hill's device of my own. In fact, every hive is prepared for winter with such device, which serves as a communication bridge for the handy clustering of the bees during the cold season.

This communication-bridge, to be placed on top across the frames, and a $\frac{1}{4}$ inch space for the free communication of the bees from one frame to another, and is provided with an auger-hole, which, when not in use, is covered with a bit of glass. Now any hive marked as light in stores in the fall will receive in the spring an early feeding through this auger-hole. Honey in sections can be given to the bees if the feeder be made of the right size.

In conclusion I must say that I found the principle of this feeder in the French paper, "L'Apiculteur," of Paris. Quebec, Canada.

The Part Bees and Other Insects Play in Fertilizing Fruit-Tree Bloom.

BY THADDEUS SMITH.

SINCE writing an article on this subject, published in the American Bee Journal of April, 1901, pages 262 and 279, we have had another season for observation and investigation; and as I made it my especial business to watch closely the fruit-bloom last May for insects, I propose to give some results of the investigation.

It is well known to be a fact beyond dispute that certain islands in Lake Erie, where there are no bees kept and bees never visit, produce an abundance of fine fruit. We see here, year after year, full and quite regular crops of fruit of various kinds, grown more uniformly, I believe, than in any other place in the state of Ohio, or of the same latitude. This completely settles the question with myself, and with others who have had personal evidence of the conditions that the bees are in no way necessary, nor of any advantage whatever, in producing a good crop of fruit—not on these islands, at any rate. If not necessary on these islands, why should they be anywhere?

This question being settled, the investigation I had to make last season was to try to find out what part, if any, other insects played in fertilizing fruit-bloom. To this end I gave my especial attention, not only here at home but upon other islands where I knew there were no bees. On May 15 I visited Middle Bass. I found the greatest profusion of bloom on many varieties of fruit trees and shrubs. They grow every variety of fruit and berries that can be grown in this latitude. They grow them successfully without bees. The friend with whom I stopped said to me:

"I have been watching the fruit-trees closely for bees and other insects. I have not seen a bee. The only insects seen were on the apricot trees which bloomed a week before the other fruit-trees. They were a peculiar kind of insect that I never saw before, and they soon disappeared. I have been among my trees daily since in bloom, and never saw anything more of this insect upon any other trees, and no other insect of any other kind."

Such was the testimony of Mr. George M. High. Mr. High is personally known to Prof. A. J. Cook, who will vouch for his intelligence and integrity, and he is known by many other men of prominence who have made his acquaintance in visiting the summer resorts of these islands, and through business. He is widely known as an intelligent and successful fruit-grower. In company with Mr. High we renewed the search in his orchards with the like results he described.

I watched very closely the bloom of fruit-trees and vines on my own place. Bees I found, for there are bee-keepers scattered all over the Island. My search was for the "other nectar-loving insects" that we are told do the work of fertilizing bloom with the bees or without them. I will not say that I did not see one single insect on any of the flowers besides the bees, but they were very scarce, and very small, much more so than I expected to find them. There were practically none worth taking into consideration in connection with carrying pollen from one flower to another. It would have been impossible that there were enough to visit one flower in 10,000. It was too early in the season, as has been observed heretofore by Mr. Hershisier, Mr. High, myself and others, for these nectar-loving or other kinds of insects to be out in any numbers to be of benefit in pollinizing the bloom.

In reviewing my former article upon this subject, our erudite friend of the "Afterthoughts," makes the very uncharitable intimation that I was not competent to see insects, and my evidence unreliable as to there being no nectar-loving insects found upon the fruit-bloom on these islands where there are no bees. Mr. Hasty dismisses our testimony with a sneer, saying: "It is quite possible that a skilled entomologist with *only half an eye*, would find nectar-loving insects *abnormally thick*." (Italics mine.) And again he says: "Apparently neither himself nor his friend are well-posted in insect lore." Perhaps not. But is it necessary to be "well-posted in insect lore" to see the insects when you look carefully for them as we did? The experience of over a quarter of a century engaged in fruit-culture, where we have to study and combat the many diseases and insects injurious to both trees and fruit, ought somewhat to qualify us to see insects of any kind on the trees, and should entitle our evidence to some respect. No, nectar-loving, nor other kind of insects, are *not* found thick here, "abnormally" or otherwise, as early in the season as the blooming of fruit-trees.

Mr. Hasty suggests that there should be a "chance for some friendly hand to show how much better results" could be obtained on these islands with bees. I believe that no intelligent person will claim that bees or other insects can possibly have any influence on the size and quality of fruit. It is only thought by some that bees have something to do with disseminating the pollen, thereby fructifying the stamens and giving a *better setting* of fruit, and a larger crop, than there would be without them. The most kinds of fruit on beeless islands *set too much fruit*, and it has to be picked off—thinned out—to keep it from being too small. Those that do not require thinning usually set as much as is wanted to give good size and quality. Now, what chance could there be to obtain better results with bees here when we get more fruit set than is wanted?

But that "friendly hand" has, incidentally, repeatedly tested that very thing by comparing the fruit crops grown on an island with bees, and that grown on a neighboring island without bees. Pelee Island, like its neighbors in this group of islands, is well adapted to fruit-growing, and many colonies of bees are kept upon it, but we know that the fruit crop is no more certain, no larger nor better than our neighbors' who are without bees. In fact, there are some incidents that would indicate to a superficial observer that the best crops are grown where there are no bees. For instance, last season I had 60 bearing peach-trees of a certain variety that bloomed profusely but did not set a peach. In visiting my neighbor in October I found that his peach-trees, of the same variety, had produced a good crop, and there were no bees. Now, if this had been the reverse—if the failure had been where there were no bees instead of where bees were plentiful—how quickly the incident would have been used as an argument to show the importance of our little friends in this matter. And this is just like all other arguments used to show that bees increase the fruit crop. The bees have nothing to do with it.

I would be pleased to have Mr. Hasty investigate to see if insects frequent the bloom here in May in "abnormal numbers;" and I hereby invite him to come over to Put-in-Bay next May. [This month.—Ed] and see for himself. There is a steamboat line from Toledo to Put-in-Bay, and it is only a short and pleasant ride. From the Bay he can visit other islands, and I shall be glad to have him visit me on Pelee Island, and I shall take pleasure in meeting him and entertaining him while on our Island, and will do what I can in assisting his investigation. I have no theory that I am wedded to, no "ax to grind," and only seek the truth. If he cannot come let him send some one else who is "well-posted in bee-lore." Not some one with "half an eye," or one eye, but with two good eyes assisted by glasses.

I have but little hopes of any accepting this invitation. They might learn what they do not wish to know. The old adage, "Convince a man against his will, he will be of the same opinion still," is quite true; and to convince one against his supposed pecuniary interest is still harder. The advocates of this bee-pollinizing theory seem to think that it is of great importance to bees and bee-keepers that its truth should be established, and therefore they are hard to convince otherwise, even when the facts are against them. There should be no antagonism between bee-keepers and fruit-growers. An experience of 40 years in both occupations has convinced me that neither is injured nor benefited by the other—not in my locality.

Ontario, Canada, Nov. 13, 1901.

[In the interest of fairness to both sides of this controversy we give place to the foregoing article. It should have appeared long ago, but perhaps now it will be just in time for those who so desire to make more careful investigation along the line indicated.—EDITOR.]

Our Wood Binder (or Holder) is made to take all the copies of the American Bee Journal for a year. It is sent by mail for 20 cents. Full directions accompany. The Bee Journals can be inserted as soon as they are received, and thus preserved for future reference. Upon receipt of \$1.00 for your Bee Journal subscription *a full year in advance*, we will mail you a Wood Binder free—if you will mention it.

Please send us Names of Bee-Keepers who do not now get the American Bee Journal, and we will send them sample copies. Then you can very likely afterward get their subscriptions, for which work we offer valuable premiums in nearly every number of this journal. You can aid much by sending in the names and addresses when writing us on other matters.

* The Afterthought. *

The "Old Reliable" seen through New and Unreliable Glasses.
By E. E. HASTY, Sta. B Rural, Toledo, O.

BEES—RACES AND SPECIES—DEEP-TUBE FLOWERS.

Most species in Nature have few different races within the species, or none at all. *Apis mellifera* has distinct races, so many that it is doubtful if any other natural species can equal it in that respect. This is a hint for us. Prof. Cook thinks that we shall find the bee very responsive to intelligent breeding. In addition to the advantages of long-tubed flowers, which he mentions, there is another important one: They hold and keep a supply of nectar which lasts over and through the spells of weather in which none is secreted. I have seen dry hay in the mow in which the clover heads were decidedly sweet to chew. Page 183.

HONEY AND BEE STATISTICS.

It took lots of able, very able, guessing to get so far out of the old, inflated, and worthless estimates, and so nearly down to hard-pan, as are the Gleanings' estimates of honey-statistics on page 185. And this estimate makes the per capita over two pounds per person, which same might be a little hard to prove up. It would be ten pounds for each family of five; and so few families actually consume that, and such an immense number of them never eat an ounce of honey from one year's end to another, that a grain of doubt is still permissible. Were it not that bakers and other big operators take so large a share of the extracted, the grain of doubt would be something more than a grain.

Glad Uncle Sam has gotten around at last to have some bee-statistics. Of course, we are not to take them exactly as we take the multiplication-table and the Sermon on the Mount. We may safely draw a little on our own inner consciousness in digesting them. Manifestly the number of people keeping bees—707,261—is *not an exaggeration*. That's something to the good—and almost new. People are not very likely to report bees where there are none, that is, not when guessing colonies by the county-yields to actual enumeration. We may take also as safe on one side the total number of colonies—4,109,626—and the very modest valuation, which figures \$2.50 per colony. When it comes to the value of the product it's more of a guessing-match; but the tendency to exaggerate in guessing may be much more than balanced by individual census-takers, assuming that there are no bees in territory where such is not the fact. This last source of error we can know little or nothing about. The two are not for the same year, nevertheless it may be worth while to put the United Sta. figures and the Gleanings' estimate side and side:

VALUE OF PRODUCT.

United States.....	\$6,664,904
Gleanings' minimum.....	8,000,000

POUNDS OF HONEY.

United States total.....	61,196,160
Gleanings' (comb only).....	50,000,000
Gleanings' total.....	175,000,000

As for the number of pounds, I'll guess that the truth lies between the two somewhere. Page 211.

HANDLING COMBS OF HONEY.

It seems to me that if Mr. Doolittle was an extracting fellow, and if he tossed heavy combs with the tips of his middle fingers for hours, the finger muscles would cry out, "We are sore, sir." Try the method, of course—then if you don't entirely like it try this: Grasp the comb at the corners with a grip like a vise. Imagine yourself about to pitch a base-ball with the center of the earth for home-plate. Pitch it. In other words, don't let the comb go down by its own weight and be jerked back, but jerk it both ways, being especially snappy on the down motion. But it won't do to try this on tender combs which are not built down to the bottom-bar. Page 185.

TOO MUCH RAIN AND GOOD HONEY-FLOWS.

Chili, down at latitude 40, appears to be a wet place. I figure 2,860 millimeters to be 9 feet 4 inches—more rain than we want sprinkled over us while we are trying to feed

up the bees—especially as we get the idea that there is no dry season there. Evenly distributed, it would give quite a heavy rain for every day of the year—one-third of an inch. Wonder if this too much rain bears some sort of relation to the very excellent honey-flows found just north of the rain-belt. Page 187.

FASTENING NO-D RIP STRIPS IN CASES.

Apparently S. D. Buell has a winning idea for getting the strips on the bottom of honey-cases. Slotted board three inches wide to hold them just where wanted, and nail them on the bottom-board before the rest of the case is put together. But T. F. Bingham thinks that first-rate paste will do instead of nails, and save possible leaks through nail-holes. Hardly know if the Buell method could come in when paper trays are to be added. Pages 189 and 219.

TEMPERATURE IN A WINTER BEE-REPOSITORY.

Wouldn't that corrected error on page 190 be a little more ideal if it were corrected some more? Get it up another 10 degrees, and say 45; 35 looks like hovering too close to the freezing-point. Pages 156 and 190.

Questions and Answers.

CONDUCTED BY

DR. C. C. MILLER, Marengo, Ill.

(The Questions may be mailed to the Bee Journal office, or to Dr. Miller direct, when he will answer them here. Please do not ask the Doctor to send answers by mail.—EDITOR.)

Building a Bee-House—Finding Queens.

I am very glad you called my attention to the question I should have asked above all others. But it is never to late to mend one's ways and profit by mistakes made. I will therefore collect a few of the many questions I would like to ask, and bother you once more. I will give you a pen description of the bee-house I have been thinking of making.

It is to be 10x12 feet, with an 8-foot studding 2x6 inches, and boarded up on both sides with matched lumber, and tarred paper between the boards; studding on both sides. That will keep the sawdust from leaking out in case there would be loose knots in the lumber.

I will put tarred paper on the outside, and then side the house up with good siding, and place one foot of saw-dust on the ceiling. To keep the house warm when it gets too cold, I will build a storm-shed in the same manner, and in the shed put a tank of water that has pipes running through the wall to the room with the bees in, so arranged that there will be a complete circulation of water. I will heat the water with a large lamp placed under the tank; this tank will have small tubes running from end to end, the same as a boiler with a tight-fitting hood on top, and a small pipe passing out of the roof. In this way there will be no fumes in the bee-house, and by turning the lamp high it will heat the water faster, and by letting it burn low it will keep the water just warm.

I have been thinking of using the house to keep bees in all summer, and in winter store a few more colonies that I might have in my yard. Now:

1. Would you advise me to build such a bee-house and operate it in that way?

2. When I took my 6 colonies out last week I found 5 of them had a good deal of brood, and one had none at all, nor any eggs, either; and the second day this one hive had no bees, either. Where did the bees go?

3. What made the 5 colonies rear so much brood while in the cellar? The temperature was all the way from 38 to 47 degrees all winter, and the bees very quiet?

4. I found 1 or 2 cells of brood sealed here and there in all parts of the frames. What does this indicate?

5. Will it injure the bees any to rear brood in the cellar? and will the chilly weather we have now (25 degrees above) harm the brood any if warmly packed on top?

6. I would like to do away with hunting up the queen, and have thought of placing the colony I wish to divide on top of a new hive with full sheets of foundation in the frames, and when I find eggs in the lower hive take the upper one off and set it by the side of the new one, and in

introduce a laying queen as soon as the time comes. Will that work all right? How long will it be before the queen comes down into the new hive? MINNESOTA.

ANSWERS.—1. No, I wouldn't advise it. I am very much afraid it would not come up to your expectations.

2. Very likely they swarmed out into one of the other hives.

3. I don't know; and yet it is nothing very unusual for brood to be present before bees are taken out of the cellar.

4. Nothing unusual.

5. They will probably come out all right.

6. How are you going to tell where the queen is? For when you find eggs in the lower story you are not at all sure the queen is there. I have had many colonies with two stories, and when the queen laid a quantity of eggs she would return to the upper story, and then kept going from one story to the other, so that I could never tell which story she was in without finding her. Possibly this plan may serve your desire of knowing in which of two hives the queen is without actually seeing her: Divide the colony, putting part of the combs with their bees in another hive. Two or three days later the part that has queen-cells started will be the queenless one. Of course that is on the supposition that no queen-cells were present at the time of making the division.

Dogwood and Honeysuckle—Bumble-Bees—Increase.

1. Does the enclosed flower yield honey? It grows on a tree called "dogwood," and the woods are full of it, hereabouts. Also, does "honeysuckle" yield honey?

2. Is the honey gathered from hops and bitterweed (wild chamomile) bitter in taste? I bought some colonies in Alabama lately, and the honey contained in the hives is very bitter, and tastes like a drugstore.

3. Do bumble-bees sting, or store honey? I notice about my well a great lot of rather small black bees that live in holes in the ground. To-day I noticed them balling a queen. Do you know anything of them?

4. If I take four frames containing some brood from a strong colony, and put it in a new hive, and move the old hive to a new stand, will I not stand a fair chance of getting two colonies? What is the objection to this means of increasing when one does not know enough about queen-rearing to increase *via* nuclei? MISSISSIPPI.

ANSWERS.—1. The dogwood (*cornus florida*) which you send does not, I think, yield honey, and the bees have not tongues long enough to reach into the deep flowers of the honeysuckle.

2. I don't know; I'm afraid it is.

3. Bumble-bees sting, as many a barefoot farmer's boy can testify; and they store honey, but never in any considerable quantity. I never found a nest with as much as a tablespoonful of honey in it. I have seen small black bees, but I am not acquainted with their habits.

4. Yes, you will stand a fair chance of having two colonies, and possibly three; for if the queen is taken to the new stand, and the queenless part left on the old stand, that queenless part, being strong, may send out a swarm when the first young queen emerges. An objection to the plan is that the queenless part will not have any increase from its new queen for nearly six weeks.

Drones—Rearing Queens—Transferring, Etc.

1. I have drones from a laying worker whose mother was a full-blood Italian queen; they are so yellow that you can tell them as far as you can see them. The drones in another full-blood Italian colony look like common black ones a little way off. Why is this? and which is right?

2. This is our main swarming-time, but on account of the cold spring they have not started but are killing off the drones like they do late in the summer. Why is this?

3. Will drones from one hive go into another hive?

4. Suppose I give a queenless colony young brood to rear, say to-day, and they start to rear a queen, how many days before they will have one sealed up?

5. Which will they use, an egg or one just hatched?

6. Which will be the most apt to try to rear a queen, one with laying workers or without? If there is any difference, which race will be the most likely to rear one, Italian, black or Carniolan?

7. Speaking of black, we have what a bee-keeper called a "brown gum" and "a little black fellow" that would try

to sting the "old boy" himself. Which is meant when bee-papers say "black?"

8. I have a large number of queenless colonies. Last summer and fall I think a large number superseded, and reared young queens. Do you suppose this has anything to do with the present large number of queenless ones? If so, how?

9. I know the comb comes off of the bees; where do they keep it, or rather, where does it come out?

10. Now, Dr. Miller, you know more about bees in 5 minutes than I do in a year, but I want to give a point or two. I read your answers to all our greenhorn questions; you advise several in answer to their question about transferring out of box-hives to do so in fruit-bloom time. I am sure that is all right up there, but in this part of the country, and may be in other parts, it is quite different. It is 2 or 3 weeks from fruit-bloom until our next honey-flow, and it is nearly always cold during fruit-bloom and for the next 3 or more weeks. Should one transfer then, and not feed, he would lose his bees, every time. The reason I call your attention to this is, because I believe that nearly all of us greenhorns that have bees in box-hives would never think of feeding, but would use an empty hive or dry combs. ALABAMA.

ANSWERS.—1. I don't know why it is, but there seems to be a great variation in appearance of drones, and either one may be pure stock.

2. Weather so cold that bees do not gather freely is sufficient reason in the eyes of the workers for disposing of their lazy brothers.

3. Yes, they seem to be free commoners.

4. In something like three or four days.

5. A larva perhaps two days old, or younger.

6. I don't know whether there is any difference; if there is, I should guess the Carniolan.

7. The subject is a little mixed, but usually the term "brown German" and the "black" mean the same thing. Tunisian bees are the blackest I ever had, and possibly the blackest that exist, and the ones I had were what my assistant called "vindictive little sinners."

8. It may, and it may not. The young queens may have been lost when taking their wedding-flight. As a rule, I think there is little loss of queens when bees do their own superseding.

9. Look sharp and you can see the little scales of wax between the rings on the under side of the abdomen, where they are secreted by the wax-glands.

10. No one realizes more fully than I the fact that there are a whole lot of things that I don't know about bees; and I feel a good deal like a humbug sometimes when I try to answer about things hundreds of miles away where I have never been, and I will be ever so much obliged if you good people in the South will straighten me out when I go wild in my answers. You probably are entirely right that fruit-bloom would be a bad time for you to transfer. More and more that time is going out of use, and the transferring is not done till 21 days after the issuing of the first swarm.

Stimulative Feeding.

Why is it that stimulative feeding of bees in the spring, in the hands of amateurs, is always spoken of as a dangerous business, and referred to as a two-edged sword, etc.?

NEW BRUNSWICK.

ANSWER.—Because feeding induces the bees to fly, and if the weather is such that they will be chilled and lost, there may not be a sufficient gain in brood to overbalance the loss.

Pollen Substitute and Robbing.

Will throwing out corn-meal, rye or Graham flour that has enticed bees from other apiaries cause robbing?

ILLINOIS.

ANSWER.—I do not believe that exposing any substitute for pollen will cause robbing.

Queenie Jeanette is the title of a pretty song in sheet music size, written by J. C. Wallenmeyer, a musical bee-keeper. The regular price is 40 cents, but to close out the copies we have left, we will mail them at 20 cents each, as long as they last.

THE AMERICAN BEE JOURNAL

PUBLISHED WEEKLY BY

GEORGE W. YORK & COMPANY

144 & 146 Erie St., Chicago, Ill.

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Prof. A. J. Cook, C. P. Dadant,
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3-Frame Nuclei For Sale.

We have arranged with a bee-keeper located in Kankakee Co., Ill., (within 12 miles of Kankakee), to fill orders for Nuclei of bees. All are to be first-class, and most of the bees show Italian markings. The queens in the Nuclei will be Italian, of this year's rearing.

The Nuclei are 3-frame Langstroth, in light shipping-boxes. Prices: 1 for \$3.00; 5 at \$2.75 each.

All are f.o.b. shipping-point, and will be sent by express, a postal card notice being mailed to each purchaser a day or two before shipping the bees.

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Smokers, Sections,
Comb Foundation
And all Apian Supplies
cheap. Send for
FREE Catalogue. E. T. FLANAGAN, Belleville, Ill.

I have a lot of 25 colonies of bees in fine condition, in hives holding frames 12x12 inches, the usual depth, that I will let go at the following rates, viz: One colony, \$5.00; 5 colonies at \$4.50 each; 10 colonies at \$4.00 each; or the entire lot to one party for \$75.00, cash with the order. These bees have a mixture of Carniolan blood in them, but are workers having averaged nearly double the amount of honey per colony that any of the pure stock did in the same apiary the past dry season. I guarantee safe delivery and freedom from disease. Act quick, for these bees are a bargain at the above price, and this advertisement will not appear again.

E. T. FLANAGAN, BELLEVILLE, ILL.
18A1t Please mention the Bee Journal.

The Rural Californian

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Owing to the increased price of beeswax, until further notice, dealers handling the A. I. Root Company's goods are compelled to raise the price of Comb Foundation 3 cents per pound above the prices found in their price-lists and catalogs. Please take notice.—Adv.

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The A. I. Root Company tell us our stock is extra-fine; Editor York, of the American Bee Journal, says he has good reports from our stock from time to time; while J. L. Gaudy, of Humboldt, Nebr., has secured over 400 pounds of honey (mostly comb) from single colonies containing our queens.

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Selected, Warranted.....	\$1.00	\$5.00	\$ 9.50
Tested	1.50	8.00	15.00
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We guarantee safe arrival, to any State, continental island, or any European country. Can fill all orders promptly, as we expect to keep 300 to 500 Queens on hand ahead of orders. Special price on 50 or 100. Free Circular. Address all orders to

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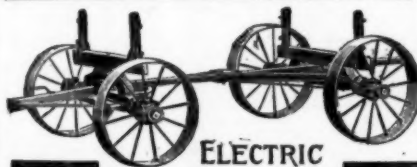
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[Parkertown is a P. O. Money Order office.]

15A26t Please mention the Bee Journal.

Wanted Comb and Extracted Honey!

State price, kind and quantity.
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make the work easier for both the man and team. The tires being wide they do not sink into the ground; the labor of loading is reduced many times, because of the short lift. They are equipped with our famous Electric Steel Wheels, either straight or stagger spokes. Wheels any height from 24 to 60 inches. White hickory axles, steel hounds. Guaranteed to carry 4000 lbs. Why not get started right by putting in one of these wagons. We make our steel wheels to fit any wagon. Write for the catalog. It is free.

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75 colonies in Improved Dovetailed Hives, in lots to suit purchaser.

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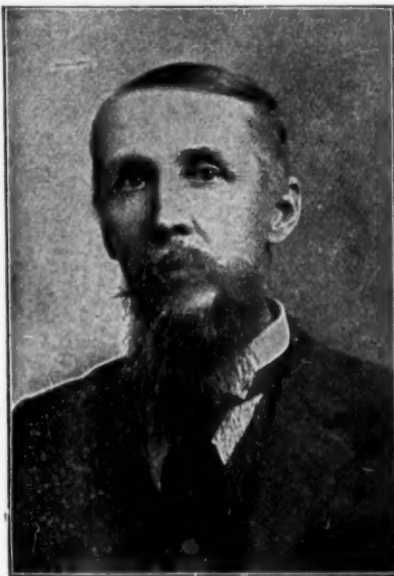


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to meet those who work for us. Cow keepers always have money. We start you in business. You make large profits. Easy work. We furnish capital. Send 10 cents for full line of samples and particulars.

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Weekly Budget.



EMERSON T. ABBOTT,

The New General Manager of the National Bee-Keepers' Association.

Editor E. R. Root, of Gleanings in Bee-Culture, made this comment on Mr. Abbott, when announcing his election to the office of General Manager:

"One of Mr. Abbott's marked characteristics is his strenuous aggressiveness. Perhaps the fur may fly. If it does, it will be in the defense of the rights of bee-keepers."

And Editor Hutchinson, of the Bee-Keepers' Review, had this to say:

"Mr. Abbott is enthusiastic, progressive and aggressive, has modern ideas, always attends the conventions, is a good speaker—the best we have in our ranks—and I bespeak prosperity for the Association under his leadership."

MR. BOOMER AND HIS APIARY.—Through the courtesy of the Canadian Bee Journal, we are permitted to present to our readers the picture on the front page of this issue, and also the following, all taken from the April number of that paper:

A WATERLOO COUNTY APIARY.

We have pleasure in giving a picture of the apiary of Mr. A. Boomer, of Waterloo Co., Ont. Many of our readers are personally acquainted with this tall, old gentleman, here shown bending over his bee-hives, having met him in convention. We think that we are safe in saying that Mr. Boomer is the tallest of Ontario's bee-keepers, measuring 6 feet 4 1/2 inches, and although he has reached the full three-score years and ten, he is still straight as a reed, hale and hearty, and can run after a swarm like a boy. We wish that our good friend may be long spared to enjoy his pleasant and profitable "side line," as will be noted in the following:

"The photograph of my apiary was taken in August, 1901. I have been keeping bees for some 15 years with somewhat varied success. When I commenced I was, as I am still, a traveling agent, and as I was advancing in years I was looking for something that would give me some employment, and possibly some returns, when I became too old to travel; but long before I felt like giving up

the road I found myself with a yard of fully 100 colonies of bees. For a few years I found it more profitable to hire a man for some three months in the early summer than to give up my business; but last summer, although 70 years of age, I did the work myself (my partner, nearly as old as myself, helping me a little in the extracting-room), and I attended to the Division Court business of the township, of which Court I am the clerk; did considerable insurance business and conveyancing, as well as keeping up the sale of sewing machines and musical instruments. Not so bad for an old man, is it? especially as the crop of honey last season was somewhat large, running up to fully 10,000 pounds. I have only had one season of larger returns since keeping bees, and that was in 1899, when it ran up to fully 11,000 pounds, averaging about 120 pounds per colony. Last year the average would be about 110 pounds. My greatest average in any one year was 125 pounds per colony.

"I use the Richardson hive, mostly those made with beveled joints and sun caps, and don't have to keep the covers on with stones. My yard, as will be noticed, is rather contracted for such a large number of colonies, being only about 60x70 feet, the rest of the ground being taken up with buildings and garden. The small building to the right is the extracting-room, size 10x14.

"My bees are usually very cross, last year particularly so, and this, in the judgment of practical bee-keepers, was probably due to the congested state of the yard. This I intend to overcome by removing about one-fourth of them to an out-yard this season. It may be possible that if I were to devote my whole time to it I might make a greater success of it, but I find that my winter losses are not greater than of those who devote their whole time to them, and my average yield of honey per colony is about as good as that of the specialist.

"I might mention that at the time the photograph was taken I was in the yard taking out combs for extracting. A. BOOMER."

FARMERS' NATIONAL CONGRESS.—It is quite probable that farmers generally do not fully realize the scope and extent of the Farmers' National Congress, as otherwise they would take a much deeper interest in it. The topics discussed are more particularly those of a national or international character, quite different from what is generally on the program at farmers' institutes. The following is a copy of the program for the 1902 meeting:

1. Inter-oceanic canal.
2. National irrigation.
3. Reciprocity—how may it affect agricultural interests?
4. Effect of present insular possessions on the agriculture of the United States.
5. Preservation of forest and fruit trees and reforestation.
6. Injurious insects, insect pests and fungi.
7. What part of a man's farm does he sell when he sells the crop?
8. Postal reforms particularly affecting the farmer.
9. Mutual relations of Northern and Southern farmers.
10. Dairy interests of the United States as related to the markets of the world.
11. Farm products other than dairy products in the markets of the world.
12. The labor problem from the farmer's standpoint.
13. How can we best build up our merchant marine?

The Farmers' National Congress is made up of delegates and associate delegates appointed by the governors of each State. Every governor appoints as many delegates as the State has representatives in both houses of Congress, and as many associate delegates as he chooses.

The meeting will be held at Macon, Ga.,

To make cows pay, use Sharples Cream Separators. Book Business Dairying & Cat. 212 free. W. Chester, Pa.

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Prompt service is what I practice. Satisfaction guaranteed.

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Orders taken for Queens—GOLDEN ITALIANS, RED CLOVER QUEENS, and CARNIOLANS. For prices I refer you to my catalog.

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Daughters of Select Imported Italian, Select long-tongued (Moore's), and Select, Straight 5-band Queens. Bred 3/4 miles apart, and mated to select drones. No bees owned within 2 1/2 miles; none imported within 3, and but few within 5 miles. No disease. 29 years' experience. WARRANTED QUEENS, 75 cents each; TESTED, \$1.50 each. Discount on large orders. 200 tested reared last season ready to-day. Contracts with dealers a specialty. Discount after July 1st. Send for circular.

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Bees For Sale.

Two, 3 or 4 frame Nuclei—cheap. Good Queens. 18A2t G. W. GATES, BARTLETT, TENN.



\$300,000,000.00 A YEAR
and you may have part of it if you work for us. Uncle Sam's poultry product pays that sum. Send 10c for samples and particulars. We furnish capital to start you in business. Draper Publishing Co., Chicago, Ill.

1902—Bee-Keepers' Supplies!

We can furnish you with The A. I. Root Co's goods at wholesale or retail at their prices. We can save you freight, and ship promptly. Market price paid for beeswax. Send for our 1902 catalog. M. H. HUNT & SON, Bell Branch, Wayne Co., Mich

Oct. 7-10, and the people of that city will give a hearty welcome to all who attend.

The Southeastern Passenger Association has granted a rate of one fare for round trip; and there is a fair indication that the other passenger associations will make better than an excursion rate.

The men who will be invited to take part in the program will be the choicest that can be selected, and each one will be an acknowledged leader in his line. Isn't it about time the farmers took a practical hand in helping to solve the problems that pertain to their own affairs?

We hope to have at least 1000 delegates, associate delegates and visitors.

John M. Stahl, 4328 Langley Ave., Chicago, Ill., is secretary, and will gladly answer any correspondence for the Congress.

J. H. REYNOLDS, Treas.



Light Honey-Yield Expected.

Our rains came very early in this locality, and then a long, dry spell. Flowers started to bloom and then dried up. Then in March we had some good rains, which will insure good farm crops. But I fear Southern California is "not in it" for a honey crop. My judgment, based on 20 years' experience, makes me think the yield will be light.

DELOS WOOD.

Santa Barbara Co., Calif.

Rather Bad Spring for Bees.

The spring has been rather bad for bees; but to-day the thermometer has made a jump, and at noon it stands at 83 degrees in the shade. I did not suppose it had been warm enough to bring out dandelions, but they are out in considerable number to-day. Unless, however, we soon get rain all vegetation will suffer beyond repair.

I seem to be stealing some other man's thunder on page 245. All that is credited to Dr. Miller on the second half of the page should be credited to some one else.

C. C. MILLER.

McHenry Co., Ill., April 21.

[That seems to be an error of the shorthand reporter. It is impossible to correct it now.—EDITOR.]

Packing Bees for Winter.

On page 238, Mr. Turner Buswell, in referring to my statement as to how I winter my bees, asks:

"How many inches of planer-shavings are put next to the carpet? and why a layer of fine sawdust?"

In regard to the layer of shavings directly over the brood-nest, I was misunderstood, as I do not put any planer-shavings directly over the quilt covering the frames, but pack underneath and all around the hive up to within about 2 inches of the top of the hive, with the shavings, then I put on fine, dry sawdust, and extend about 2 inches above the hive; then put on 8 or more inches of the planer-shavings.

The reason I put the fine sawdust just over the brood-nest is for the same reason that one puts fine woolen blankets on the bed in winter, or the finest underwear next to the body, i. e., to retain the heat.

The planer-shavings are next applied in greater depth to keep out the extreme cold. Whether the sawdust alone would be just as good I can not say, but I do know that the shavings, which form numerous little dead-air spaces, are all right.

One year ago this winter the packing was given a good test when fully 75 percent of

the bees through this part of the country were lost, while mine came through with very little loss (and that was caused by starvation).

I have not examined all of my bees as yet this spring, but what I have examined are apparently in as good condition as when they were packed last fall. IRA D. BARTLETT.
Charlevoix Co., Mich., April 14.

Another Frame-Spacer.

I send a gauge for spacing frames in the hive. A good many devices have been offered and used, but, having tried them all, there is no device that gave me such satisfaction as the gauge I am using, and have had for the last 20 years. Put a gauge at each end of the hive across the frames, and fasten a similar gauge in the center across the body of the hive, then when you fasten the cover and bottom-board with hooks to the hive, you may turn the hive whichever way you like, and none of the frames will become dislodged, and no bees hurt. As the gauges at the ends cover up the rabbet, the super closes better at the ends, and the bees have no chance to get out or in if the outside rim should warp.

If you want to take out or invert a frame, all you have to do is to take off the gauges, and you may move the frames to either side and take out or insert with the greatest ease, without fear of crushing any bees or scraping

RUMELY

That is a name that means character and utility. It suggests the best in Threshing Machinery. Investigating, start with the Rumely and you will end at the same place. Get our catalog on the New Rumely Separator and the Rumely Gear-Driven Traction Engine. All approved devices and appliances to each and constitute the one perfect threshing outfit. Catalog shows our engines for all purposes. We send it for the asking. Write to-day.

M. RUMELY CO., La Porte, Ind.
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BINGHAM'S PATENT Smokers

24 years the best. Send for Circular. 25A1f T. F. BINGHAM, Farwell, Mich.



SHEEP MONEY IS GOOD MONEY and easy to make if you work for us. We will start you in business and furnish the capital. Work light and easy. Send 10 cents for full line of samples and particulars.
DRAPER PUBLISHING CO., Chicago, Ills.

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Maple Hill Poultry Farm

Is now selling **EGGS** for hatching from Standard Bred, High-Scoring stock. Barred Plymouth Rocks, Black Langshans, and Rose-Comb Brown Leghorns. Eggs, \$1.50 per 15; \$2.50 per 30. Stock in season.

EUGENE HAMBAUGH,

16A4t MT. STERLING, ILL.
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TEN DAYS FREE TRIAL allowed on every bicycle purchased of us. We ship on approval to any one in U.S. or Canada, without a cent deposit.

1902 Models, \$9 to \$15

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500 Second-hand Wheels

all makes and models, good as new,

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at half factory cost. Tires, equipment,

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FOR SALE.

40 colonies of Hybrid Bees, all in Dovetailed Hives, on 8 self-spacing Hoffman Frames. One to 10 colonies, \$3.00 per colony; 10 or more, \$2.50 per colony. One super goes with each hive. All bees guaranteed to arrive safely by express. Address,

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name and address and one will be mailed you **FREE**

describing and listing the finest line of **BEE-KEEPERS' SUPPLIES** in the world, is ready. If you have not been receiving a copy annually, send us your

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and you never know just when that will be—it's very convenient to have at hand a good, reliable, dependable remedy, like

Watkins' Vegetable Anodyne Liniment.

A burn, a bruise, a frost bite, a cut or a sprain, an attack of rheumatism, cholera morbus, cramps, diarrhoea, flux, sore throat, mumps or diphtheria do not admit of experimenting. You want something to help you, and you want it right away. Why not, then, keep on hand a really reliable remedy, so as to have it by you when you need it?

Watkins' Liniment, for internal and external use, for man and beast, has been for 40 years the best standard household remedy known to medical science. It has peculiar penetrating qualities, and gets at the root of the trouble as does no other liniment.

Watkins' Vegetable Anodyne Liniment is sold by our traveling salesmen through the country. If our agent has not called on you, send us your name and address at once, and we will see that you are promptly supplied. Price \$1.00 and your money back if it isn't the best liniment you ever used.



Watkins' Home Doctor and Cook Book free.

Gives home treatment for all common diseases of man and beast; contains numbers of valuable recipes, weather forecasts and an immense amount of interesting and useful information, for home and farm. Something for every member of the family, old or young. Send for copy, free.

THE J. R. WATKINS MEDICAL CO., 10 LIBERTY ST., WINONA, MINN., U. S. A.

We want a few more live, hustling men who want to earn a good living. Write for particulars.



30 cents Cash paid for Beeswax.

This is a good time to send in your Beeswax. We are paying 30 cents a pound—CASH—for best yellow, upon its receipt, or 32 cents in trade. Impure wax not taken at any price.

Address as follows, very plainly,

GEORGE W. YORK & CO., 144 & 146 Erie St., Chicago, Ill.

Yes, Sir!

The MUTH'S SPECIAL dovetail hive is a "Cracker Jack." COVER and BOTTOM-BOARD are absolutely warp-proof. We know because we are practical. Our illustrated catalog explains it all. You can have one by asking. Not a hive left over from last season. We sell the finest **SUPPLIES** at manufacturers' prices.

STANDARD BRED QUEENS, none better than our **BUCKEYE STRAIN** of 3-BANDERS and MUTH'S STRAIN **GOLDEN ITALIANS**. 75 cents each; 6 for \$4.00. Safe arrival guaranteed.

THE FRED W. MUTH CO.,

Front on Walnut Sts., CINCINNATI, OHIO.

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29 YEARS SELLING DIRECT.

We are the largest manufacturers of vehicles and harness in the world selling to consumers, and we have been doing business in this way for 29 years.

WE HAVE NO AGENTS but ship anywhere for examination guaranteeing safe delivery. You are out nothing if not satisfied. We make 195 styles of vehicles and 65 styles of harness. Our prices represent the cost of material and making, plus one profit. Our large free catalogue shows complete line. Send for it.

No. 391 Buggy. Price, \$59.00. As good as sells for \$25.00 more.

No. 749 Open Stanhope. Has 1/2 inch Kelly rubber tires. Price, \$82. As good as sells for \$50 more.

Elkhart Carriage & Harness Manufacturing Co., Elkhart, Ind.

SPLIT HICKORY VEHICLES

We put our honor against yours. If you want a new buggy or carriage this season, and would like not only to see it set up, but to use it and satisfy yourself that it is a bargain, we will ship you one on **Thirty Days' Free Trial.**

We believe our Split Hickory Vehicles are the best on the market at any price, and we believe you will give them a fair trial. If after thirty days you are not satisfied, return them to us. There will be nothing to pay. All this is fully explained in our new illustrated catalogue, which is free. Besides vehicles it shows a full line of harness.

OHIO CARRIAGE MFG. CO.,
Station 6, Cincinnati, Ohio.

Have You Seen Our Blue Cat-

alog? 60 illustrated pages; describes **EVERYTHING NEEDED IN THE APIARY.** **BEST** goods at the **LOWEST** prices. Alternating hives and Ferguson supers. Sent **FREE**; write for it. Tanks from galv. steel, red cedar, cypress or fir; freight paid; price-list free.

KRETCHMER MFG. CO., box 90, Red Oak, Iowa.

Agencies: Trester Supply Co., Lincoln, Neb.; Shugart & Ouran, Council Bluffs, Iowa; Chas. Spangler, Kentland, Ind. 12E26t



FOR GETTING NEW SUBSCRIBERS.

Red Clover Queens FOR 1902 FREE!

Long-Tongue Variety—Warranted Purely Mated

We have arranged with the queen-breeder who furnished Long-Tongue Red Clover Queen for us during the season of 1901, to fill our orders this season. Although fully 95 percent of the unmated queens he sent out were purely mated, this season all that he mails for us will be **warranted** purely mated.

We want every one of our present subscribers to have one or more of these money-maker Queens. We have received most excellent reports from the queens we supplied last season. And this year our queen-breeder says he expects to be able to send out even better Queens, if that is possible. He is one of the very oldest and best queen-breeders. His bees average quite a good deal the longest tongues of any yet measured. The Breeder he will use is direct from Italy, having imported her himself. Her worker-bees are large, of beautiful color, very gentle, scarcely requiring veil or smoke.

Orders for these fine, "long-reach" Warranted Queens will be filled in rotation—"first come first served"—beginning as early in June as possible. It is expected that orders can be filled quite promptly (even better than the past season), as a much larger number of queen-rearing nuclei will be run. (But never remove the old queen from the colony until you have received the new one, no matter from whom you order a queen).

All Queens will be guaranteed to arrive in good condition, and will be clipped, unless otherwise ordered.

A Warranted Queen for Sending us only TWO NEW YEARLY SUBSCRIBERS.

In order that every one of our subscribers who wants one of these Warranted Queens this season can easily earn it, we will book your order for one queen for sending us the names and addresses of **two new subscribers** to the American Bee Journal and \$2.00; or for sending us **one new subscription** and 30 cents more (or \$1.30), we will mail you a queen; or send us \$1.60 and we will credit your own subscription for one year, and mail you a warranted queen.

This indeed is an opportunity to get a superior Queen, and at the same time help swell the list of readers of the old American Bee Journal.

We are now ready to book the Queen orders, and also to enroll the new subscriptions. Remember, the sooner you get in your order the earlier you will get your Queen. We hope that every one of our present readers will decide to have at least one of these Queens. Address,

GEORGE W. YORK & CO.,
144 & 146 Erie Street, CHICAGO, ILL.

off the combs for the honey to run out and bedaub the bees.

As you will notice, I use only 9 frames in my hives, but a gauge can be easily made to cover 10 frames.

I make my own staples, as I could not find any to serve the purpose, but I can make hundreds in an hour.

If any of my fellow bee-keepers will try this device they are welcome to do so, and I am sure that upon trial they will agree with me that the gauges are very handy.

CHAS. H. WIELE.

Vernon Co., Wis., April 1.

[The gauge used by Mr. Wiele is a wood strip 14 inches long, 5-16 inch thick, and 3/4 inch wide, having driven into it a row of 10 small wire staples 1/8 inch from one side, the staples being 1 1/2 inches apart.—EDITOR.]

Unfavorable Weather.

In this vicinity, as far as I know, the bees have come through the winter with very little loss, but so far the weather has been very unfavorable for the bees to work; however, everything looks quite promising when the weather warms up. Almost all of the bees are wintered on the summer stands here with the best success.

The honey crop in this vicinity was a little short last year. It was too hot and dry in July, just when clover was at its best, so it dried up. My bees were ready to swarm, when the weather got so hot that they just dwindled away, so by Aug. 1 the hives looked as if they had just come out of the cellar. One bee-keeper, about 4 miles from me, thought that

\$5 TO START YOU IN BUSINESS

We will present you with the first \$5 you take in to start you in a good paying business. Send 10 cents for full line of samples and directions how to begin.

DRAPER PUBLISHING CO., Chicago, Ill.

If you want the Bee-Book

That covers the whole Apicultural Field more completely than any other published, send \$1.25 to

Prof. A. J. Cook, Claremont, Cal.,

—FOR HIS—

"Bee-Keeper's Guide."

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will always apply via the Nickel Plate Road and its Eastern connections to all points in New York, New England, and the Eastern States. Three daily trains to Ft. Wayne, Findlay, Cleveland, Erie, Buffalo, New York and Boston. Standard equipment on all trains. Meals served in dining-cars, on American club plan, at prices to suit passenger, from 35 cents to \$1.00 per meal. For particulars call on or address, John Y. Calahan, General Agent, 111 Adams St., Chicago. Depot, Fifth Ave. and Harrison St. Phone Central 2057. 2—18A3t

BEE-SUPPLIES!

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Everything used by bee-keepers. POUDER'S HONEY-JARS. Prompt service. Low Freight Rates. NEW CATALOG FREE.

WALTER S. POUDER.
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his bees had foul brood. I told him it was not that dreaded disease, but it was caused by the bees not having enough nurse-bees to feed the larvae. I have had the same thing happen with my bees. When the fall flow came on his disease disappeared, and his bees are all right again.

There has been some foul brood about 12 miles from here, but my bees have never had any foul brood that I know of.

JACOB WIRTH.

McHenry Co., Ill., April 1.

CONVENTION NOTICE.

Illinois.—The Eastern part of the Northern Illinois Bee-Keepers' Association will hold their spring meeting at the residence of O. J. Cummings, 2½ miles northeast of Rockford, Ill., Tuesday, May 20, 1902. All interested in bees are invited to attend.

R. KENNEDY, Sec.

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50 In flat and made up—at very low price. 50Ctf

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BARNES' FOOT POWER MACHINERY



Read what J. I. PARENT, of Charlton, N. Y., says: "We cut with one of your Combined Machines, last winter, 50 chaff hives with 7-in. cap, 100 honey racks, 500 brood-frames, 2,000 honey boxes, and a great deal of other work. This winter we have double the amount of bee-hives, etc., to make, and we expect to do it with this Saw. It will do all you say it will." Catalog and price-list free.

Address, W. F. & JOHN BARNES, 995 Ruby St., Rockford, Ill.

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QUEENS—Try Our Stock.

DAVENPORT, IOWA, Dec. 31, 1901.

Your queens are fully up to standard. The honey queen that you sent my brother takes the lead. She had a rousing colony when put up for winter. The goldens can be handled without smoke or veil.

Very truly yours, JOHN THOEMING.

MONTHS.....	May and June.
NUMBER OF QUEENS.....	1 6 12
HONEY QUEENS	
Untested.....	\$1.00 \$5.00 \$ 9.00
Tested.....	1.25 7.00 11.00
GOLDEN QUEENS	
Untested.....	\$1.00 \$5.00 \$ 9.00
Tested.....	1.25 7.00 11.00

Select tested, \$2.00 each, after June 1.

Breeders, \$5.00 each, after June 1.

We begin mailing Queens about May 25, and fill orders in rotation. Circular free.

D. J. BLOCHER, Pearl City, Ill.

18Etf

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Don't Shoot

Several owners of the "Uncle Sam's Favorite" RURAL MAIL BOX have tested them with a full charge of buck-shot, without damage. We do not approve of this, as it might lead to some one trying it on some other make of box, and then there would be trouble, sure.

All tests should be made before the boxes are put in service. Thousands of people are ready to back the "Favorite" against the field. Let us tell you what "they say."

BOND STEEL POST CO., ADRIAN, MICH.

It will be to Your Advantage to ascertain the rates from Chicago to New York, New England and all Eastern points, applying over the Nickel Plate Road and its Eastern connections. Three trains daily, on which there is no excess fare. One feature of service on that road is meals in dining-cars, on American club plan. Pay for what you get, but in no event more than from 35 cents to \$1.00. Folders, rates, and all information cheerfully furnished by applying to John Y. Calahan, General Agent, 111 Adams St., Chicago, Ill., Depot Fifth Ave., and Harrison St. Phone Central 2057.

4—18A3t

For Sale. 40 Colonies of —BEES—

mostly Italians. D. C. BUCKSTAFF, 18A3t 149 So. Main Street, Oshkosh, Wis.

1861 —ADEL QUEENS— 1902

Adel bees the Standard strain. My 1902 Catalog ready to mail May 1. Send for it. Address,

HENRY ALLEY, Wenham, Mass.

18A4t Mention the American Bee Journal.

HONEY AND BEESWAX

MARKET QUOTATIONS.

CHICAGO, Apr. 18.—The season in which comb honey sells prior to the new crop is now practically at an end; therefore prices are more or less irregular, as some sections in a case will be grained more or less and others free. The best lots of basswood and clover sell at 14@15c; other kinds of white at 10@13c; ambers are not in heavy supply and sell at 9@12c. Extracted is dull at 5@6½c for white, and 5@6c for amber, depending upon flavor and other qualities. Beeswax scarce at 32c. R. A. BURNETT & CO.

CINCINNATI, March 6.—The market in extracted honey is good with prices lower. Amber, for manufacturing purposes, brings from 5½@6½c; better grades from 7@8c. Fancy comb honey sells at 16c; lower grades hard to sell at any price. Beeswax strong at 27@30c.

THE FRED W. MUTH CO.

ALBANY, N. Y., Feb. 21.—Our market has not been so empty of comb honey in a long time. Fancy white comb, 15@16c; No. 1, 15c; dark and buckwheat, 13@14c. Extracted, buckwheat, 6c. Beeswax, 30c. H. R. WRIGHT.

BOSTON, March 20.—The demand for comb honey remains good. Market ranges as follows: Fancy white, in cartons, 15@16c; A No. 1, 14@15c; No. 1, 13@14c; honey in glass-front cases about one cent less. Extracted, California light amber, 7@7½c; Florida honey, in barrels, 6@6½c. BLAKE, SCOTT & LEE.

DETROIT, Apr. 8.—Fancy white comb honey, 15c; No. 1, 13@14c; dark and amber, 11@12c. Extracted, white, 6½@7c; dark and amber, 5@6c. Beeswax, 29@30c. M. H. HUNT & SON.

CINCINNATI, Apr. 11.—Stock of comb honey here is larger than it ought to be at this time of the year, and this is why it is offered for very low figures. Water-white is sold at 14@14½c and hard to obtain; for extra fancy, 15c.

Extracted finds a steady sale, and amber in sold in barrel lots for 5@5½c; water-white alfalfa sells from 6@6½c, and white clover brings from 6½@7c. Beeswax scarce at 30c.

C. H. W. WEBER.

NEW YORK, Apr. 7.—Comb honey, last year's crop, practically cleaned up, but as we wrote a little while ago we had received new crop from Cuba, and are now receiving new crop from the South. Demand is fair at 14c for fancy white, 13c for No. 1, 12c for No. 2, and 10@11c for amber.

Extracted: The market is decidedly dull. Very little demand, with large stocks on hand, some of which no doubt will have to be carried over, and indications point to a further decline in prices. We quote: White, 6c; light amber, 5½c; amber, 5c; Southern, 5¼@5½c per gallon, according to quality. Even these prices are shaded in car-lots. Beeswax, scarce and firm at 29@30c. HILBRETH & SEGELKEN.

BUFFALO, April 25.—Market is very quiet. Fancy comb, 14@15c; other grades, 9, 10 and 13c. Extracted, 5@6c; moderate demand. Beeswax, 25@33c. BATTERSON & CO.

SAN FRANCISCO, Apr. 16.—White comb, 10@12½ cents; amber, 7@10c; dark, 6@7 cents. Extracted, white, 5@—; light amber, 4½@—; amber, 4@— Beeswax, good to choice, light, 26@28c; dark, 24@25c.

Demand is not very active, and market cannot be termed firm, although quotable values remain without important change. Considerable honey of last crop is now being offered, which up to a few weeks ago had been held off the market. New crop is expected to arrive in wholesale quantity in the very near future.

BOYS WE WANT WORKERS

Boys, Girls, old and young alike, make money working for us. We furnish capital to start you in business. Send us 10c stamps or silver for full instructions and a line of samples to work with. L. PRAPER PUBLISHING CO., Chicago, Ill.

FREE FOR A MONTH

If you are interested in Sheep in any way you cannot afford to be without the best Sheep Paper published in the United States.

Wool Markets and Sheep

has a hobby which is the sheep-breeder and his industry, first, foremost and all the time. Are you interested? Write to-day.

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Fancy Glassed Comb Honey

Any bee-keepers in New York or Pennsylvania producing either White Clover or Raspberry Fancy Comb Honey (in glassed sections), will find it to their interest to write to the undersigned at once.

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**We have a Large Stock on hand
and can ship promptly.**

**SEND US YOUR ORDERS FOR
Hives, Extractors**

**OR ANYTHING YOU WANT IN THE
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WE MAKE ONLY THE BEST.

Our Falcon Sections and New Process Foundation are ahead of everything, and cost no more than other makes. New Catalog and copy of THE AMERICAN BEE-KEEPER free. Address,

**THE W. T. FALCONER MFG. CO.,
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W. M. GERRISH, East Nottingham, N. H., carries a full line of our goods at catalog prices. Order of him and save freight.

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I use a PROCESS that produces EVERY ESSENTIAL necessary to make it the BEST and MOST desirable in all respects. My PROCESS and AUTOMATIC MACHINES are my own inventions, which enable me to SELL FOUNDATION and

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Full Line of Supplies,

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BEEWAX WANTED.

GUS. DITTMER, Augusta, Wis.

European Tourists and Others destined to Eastern points, will find the low rates applying over the Nickel Plate Road to New York, New England and other Eastern destinations, specially attractive. The Eastern terminals via this line are only from three to ten minutes from all ocean steamship docks, and the service afforded is first-class. Three trains daily from Chicago. Uniformed colored porters are in charge of day coaches, whose duties require that proper care shall always be given to keeping cars clean and attending to the wants of passengers enroute. Meals are served in dining-cars at prices that are reasonable and within reach of all. Details cheerfully furnished on application to John Y. Calahan, General Agent, 111 Adams St., Chicago. Chicago City Ticket Office, 111 Adams St. Phone Central 2057.

3—18A3t

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Advance in Prices of Foundation...

We quote an advance of **THREE CENTS PER POUND—**
WHOLESALE AND RETAIL—in Comb Foundation.

We are much in need of Beeswax, and pay the **HIGHEST PRICES.** Send us all you have to spare, either for cash or trade.

**Chas. Dadant & Son,
Hamilton, Ill.**

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THE DANZENBAKER HIVE

The best comb-honey hive on the market may be obtained of The A. I. Root Co., of Medina, Ohio; at any of their branch houses, and many of their local and jobbing agencies. Send to the address nearest you, and save freight, and get quick delivery.

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The A. I. Root Co., 1024 Miss St., St. Paul, Minn.
H. G. Acklin, Manager.
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The A. I. Root Co., 1200 Md. Av., S. W. Washington.
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Carl F. Buck, - - - Augusta, Butler Co., Kan.
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The L. A. Watkins Mds. Co., - - - Denver, Colo.

Would you increase your profits? Then try the Danz. Hive. It's used from Maine to California. Read the following:

MECHANIC FALLS, MAINE, Feb. 28, 1902.

THE A. I. ROOT COMPANY, Medina, Ohio.

GENTLEMEN:—I am VERY, VERY pleased that you are willing I should recommend the Danz. hive. I have had a great many inquiries regarding it, and have not felt at liberty to recommend it over our regular hives. At first I was prejudiced against it, but the sales have increased without recommendations, and wherever I have sold they have bought again and praised the hive with extravagant claims, and I am forced to the conclusion that it is the BEST COMB-HONEY HIVE on the market.

J. B. MASON,
Manager North-eastern Branch The A. I. Root Co.

The above unsolicited testimonial speaks for itself.

M. H. Mendleson, of California, has just ordered 700 Danzenbaker supers. Sales are doubling every year. Still the demand for honey in Danz. sections is greater than the supply. If you are wise you will raise comb honey in Danz. hives.

**THE A. I. ROOT CO.,
MEDINA, OHIO, U.S.A.**

GEORGE W. YORK & CO., 144 & 146 Erie Street,
CHICAGO, ILL.,
are headquarters for ROOT'S BEE-KEEPERS' SUPPLIES IN CHICAGO. Send to them for their free Catalog.